

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 May 2001 (03.05.2001)

PCT

(10) International Publication Number
WO 01/31578 A1

(51) International Patent Classification⁷: G06M 1/04, 1/08

Philip [GB/GB]; ML Laboratories Plc, 13 Alexandra Way,
Ashchurch Industrial Estate, Tewkesbury GL20 8NB (GB).

(21) International Application Number: PCT/GB00/04045

(74) Agent: HARRISON GODDARD FOOTE; Tower
House, Merrion Way, Leeds LS2 8PA (GB).

(22) International Filing Date: 20 October 2000 (20.10.2000)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9924949.2 22 October 1999 (22.10.1999) GB

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

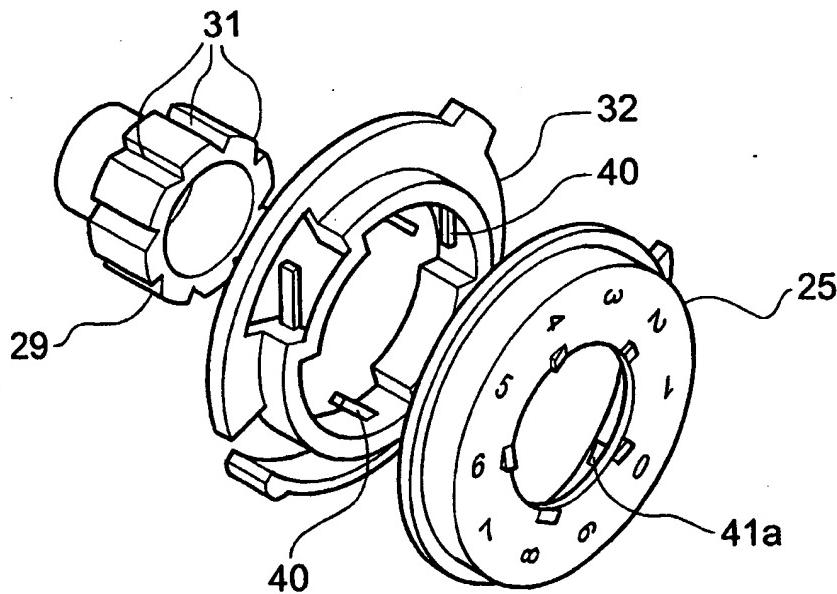
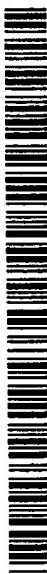
(71) Applicant (*for all designated States except US*): INNOVATA BIOMED LIMITED [GB/GB]; The Ziggurat, 25 Grosvenor Road, St. Albans AL1 3HW (GB).

(72) Inventor; and

[Continued on next page]

(75) Inventor/Applicant (*for US only*): BRAITHWAITE,

(54) Title: MECHANICAL DOSES COUNTER IN A POWDER INHALER



WO 01/31578 A1

(57) Abstract: There is described a counter mechanism which comprises a rotatable ratchet adapted to act on a drive gear, the ratchet also acting on a counter wheel, characterised in that the rotation of the counter wheel is less than the rotation of the drive gear. There is also described a medicament delivery device, e.g. an inhaler comprising the counter mechanism of the invention and also a method of treatment using the delivery device.



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(48) Date of publication of this corrected version:

13 September 2001

(15) Information about Correction:

see PCT Gazette No. 37/2001 of 13 September 2001, Section II